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VIA ELECTRONIC FILING

Ms. Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street, S.W. Washington, D.C. 20554

Re: Telephone Number Portability, et al. CC Docket No. 95-116; WC

Docket Nos. 09-109 and 07-149

Dear Ms. Dortch:

Neustar, Inc. (Neustar) submits the attached response¹ provided yesterday to the Transition Oversight Manager (TOM) and North American Portability Management LLC (the NAPM) to the November 30, 2017 Local Number Portability Administrator transition status report² and the NAPM's December 7, 2017 Report to the North American Numbering Council.³ Neustar's response explains how these reports fail to inform stakeholders of key elements of transition readiness and the potential for consumer disruption. Specifically, Neustar's response expresses concerns over (1) the inadequate and compressed testing of iconectiv's Number Portability Administration Center (NPAC), and (2) the lack of an agreed-upon, viable rollback solution should the transition to that NPAC fail.

Please do not hesitate to contact me if you have any questions.

Very truly yours,

/s/ Thomas J. Navin
Thomas J. Navin
Counsel to Neustar, Inc.

See Attachment A.

² See Letter from Todd D. Daubert, Counsel to the NAPM LLC, to Marlene H. Dortch, Secretary, FCC, CC Docket No. 95-116; WC Docket Nos. 09-109 and 07-149 (filed Nov. 30, 2017).

³ See Attachment B.



Neustar Response to Recent Transition Status Reports and NANC updates December 14, 2017

Neustar writes in response to the LNPA Transition Status Report delivered to the FCC on December 1, 2017, as well as to reports delivered by the NAPM, LLC and the Transition Oversight Manager (TOM) to the North American Numbering Council (NANC) on December 7, 2017.

Neustar is demonstrably committed to ensuring a successful process whereby Neustar shuts down its NPAC operations and iconectiv goes live with its new system, data center, and personnel. However, with less than four months remaining in the existing transition schedule, a user testing timeline abbreviated by 80% versus the original plan, and still no workable safety net should anything go wrong, the substantial likelihood of a negative outcome for consumers, service providers, and public safety is unavoidable.

Neustar has consistently noted the lack of detail in the TOM's various Status Reports with respect to readiness, testing, and contingency rollback. Except for their increasing proximity to the targeted migration dates, the most recent reports are no different. As revealed in the NAPM's report to the NANC, iconectiv notified the NAPM over four months ago of an elevated risk of delay in the transition. This notification appeared nowhere in reports to the industry or the public until now, materially calling into question the transparency of previous TOM updates. Continued failure to disclose all relevant information will not only cause additional delays in iconectiv going live but also risk significant damage to operators and consumers who rely on a stable and functioning NPAC. Two areas in particular warrant special attention: testing of the new iconectiv system and contingency rollback planning.

Testing of iconectiv System

With only four months remaining prior to the planned flash cut of the Southeast NPAC region to iconectiv (and three months until the termination of Neustar's law enforcement and public safety services), iconectiv's NPAC still is not fully developed and available for industry testing. The minimal testing¹ that has occurred to date (including both iconectiv internal testing and vendor/service bureau certification) has occurred against a partially developed system, which is open to modification to this day. According to the TOM schedule, the sole opportunity for NPAC users to perform testing against a completed NPAC is between mid-December and February 28. This roughly 10-week window for testing is itself at risk due to issues encountered during release B XML testing. Even in a best-case scenario, the current plan stands in direct contrast to commitments made in iconectiv's response to the 2012 RFP as well as to the initial industry schedule published subsequent to the 2015 FCC Selection order, both of which presumed *a full year* between iconectiv's completion of a fully functioning NPAC and any planned exposure of the new platform, data center, and network to end users or consumers.

¹ Vendor and Service Bureau certification testing for iconectiv's NPAC incorporates approximately 500 test cases. iconectiv's internal system test criteria has not been shared outside its contract with the NAPM LLC and Transition Oversight Manager, but the total number of testable requirements for the NPAC system argues for a test plan including a minimum 10,500 to 20,000 test cases. For reference, Neustar conducts 90,000 automated test cases prior to a new NPAC release.

TOM asserts that this 80% constriction of industry test availability represents no risk to consumers, but provides no basis. Neustar notes once again that the current plan allows for no industry participation in performance testing of the new NPAC, no validation of iconectiv's data conversion methodologies, and no testing of key transition requirements such as the ability for vendors and service providers to communicate with two NPACs simultaneously during the regional migration windows.

In the most recent Status Report, TOM refers to a series of Acceptance Testing Plans (ATPs) which will presumably be used to validate the readiness of the iconectiv NPAC in the time remaining before the planned April 8 cutover date. Neustar respectfully but urgently requests the following questions be addressed by the TOM for each ATP, so as to assist vendors such as Neustar, service providers, law enforcement agencies, and the public to plan for the industry-wide event:

- What is the content of each ATP, and how do they map to the RFP requirements, industry specifications, and FCC order?
- When will each ATP be executed, and what is the process for issue identification, prioritization, and remediation?
- What entity will be preparing, performing, and auditing results of each ATP? How much is iconectiv "self-certifying" the NPAC, and for what is the TOM or other third parties responsible?

Because performance is such a vital component of platform readiness for which the industry has had zero visibility to date, and because there was no attempt made to perform any parallel processing, we further recommend disclosure of the following information regarding the performance test measures:

- How have industry volumes been simulated, and what types of transactions and frequencies were used for such simulation? Did the simulated traffic mirror existing activity to ensure proper exercising of business rule logic under load?
- What was done to individually test the network, database, and application components of the system, and what was done to ensure that all components function properly together?
- How long was the new system subjected to production volumes to identify potential for issues which may only arise over time?
- Did the performance tests only use simulated data, or were any performance tests executed using converted live data?
- How was "end-to-end" performance validated? How will seven-second porting be guaranteed at volumes of two million transactions per day and greater?
- Has the help desk been load tested? Is iconectiv expected to be able to perform at full capacity
 on day one, or is there expected to be a learning curve? How is this to be verified?

Contingency Rollback

As Neustar has noted, there is currently no agreement with respect to a viable rollback in the event of a material failure of the iconectiv platform, which is to say that at present, once iconectiv begins accepting NPAC connections on April 8, 2018, there is no option for consumers and service providers to revert back to a functioning Neustar platform. Such an option would require not only a restart of the Neustar hardware and software, but also a reconstruction of industry connections and data integrity with upstream and downstream provider systems.

The rollback proposal advocated by TOM remains wholly unproven and impractical. The TOM describes the proposal as a work-in-progress, which is still being socialized with small providers and vendors; however, with so little time before the planned transition dates, the TOM is putting the success of an NPAC rollback strategy in jeopardy.

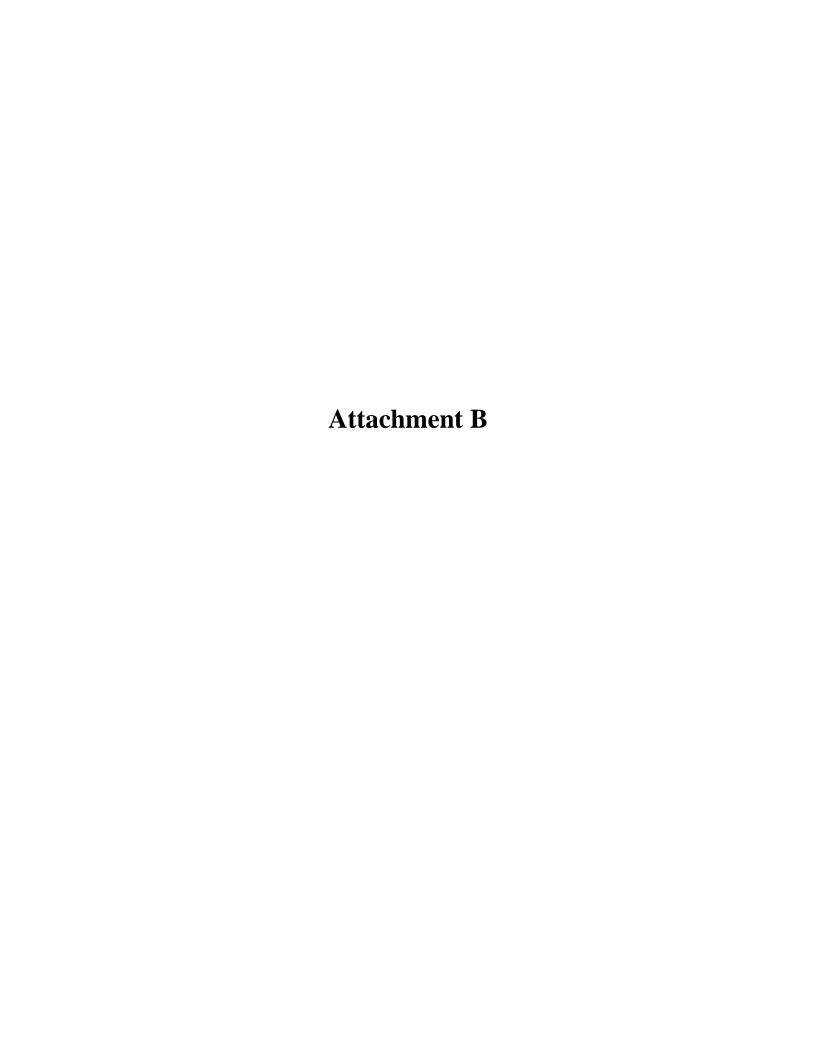
Substantively, the proposal does not fully account for the activities and data restoration efforts required to expeditiously restart all NPAC functions, if needed. As TOM and others have acknowledged, the proposal relies explicitly on existing service-provider fallout procedures as a substitute for any automation. Yet it ignores the question of whether these procedures can be supported by all service providers, and fails to acknowledge the fact that these procedures have never been exercised simultaneously by the entire industry, nor tested when the matter causing the fallout is the NPAC itself.

In this context, the recent Status Report's characterization of early-stage rollback discussions with Neustar is flatly misleading and inappropriate. Contrary to TOM's depiction (in which they reference communications held under non-disclosure), alternative automated rollback solutions for NPAC are neither unworkable nor cost-prohibitive – they were simply deemed unpalatable to the TOM for reasons that have not been fully divulged. Optimal automation of rollback solutions for projects of the size, scope, and criticality of the NPAC transition are in fact consistent with basic industry best practices – yet despite repeated requests over the past year, the TOM has provided no basis for its conclusions that such best practices are inapplicable in this case. In addition, over Neustar's objections, the TOM conducted no widespread industry consultation prior to asserting a so-called "industry-led approach."

The TOM's approach to contingency rollback planning amounts to little more than crossing one's fingers and hoping for the best. For the purpose of clarity, based on the current proposal, Neustar cannot guarantee any recovery plan for the industry in the event of iconectiv failure, and agreement to resume service in the event of a necessary rollback is dependent upon proper testing and assurance that the TOM's proposed procedures are viable. Neustar has proposed various methods for securing this assurance, but all have thus far been rejected by the TOM as unfeasible. Neustar continues to recommend an open and independently moderated discussion amongst technical experts from both NPAC administrators, vendors and service providers to re-establish industry best practices for a low-risk transition.

Conclusion

In accordance with the 180-day notice delivered by the NAPM, LLC on November 21, Neustar has initiated procedures to wind down the NPAC and associated services under its Master Services Agreement. For example, Neustar's LEAP and WDNC services will be terminated on March 9, as agreed by the parties. Neustar continues to meet all of its obligations to support the transition – in its capacity as the incumbent, national pooling administrator, and SOA/LSMS provider – and categorically rejects any assertion that the elevated risk in iconectiv's deliverables or milestone achievement belongs anywhere but with iconectiv and the TOM. It is clear from recent events and communications that far more risk exists to the current schedule than what the TOM has reported. The NPAC database is a critical component of our nation's communications infrastructure, and any risk to its integrity due to this transition must be swiftly addressed. As such, more transparent reporting related to iconectiv's readiness and contingency planning should be implemented immediately.





North American Portability Management (NAPM) LLC Report to NANC

December 7, 2017

Statements of Work (SOW) & Amendments

The following SOWs & Amendments have been approved, or are under review by the NAPM LLC;

Neustar

- o SOW 24, Revision 9, received from Neustar addresses implementation of cloud computing during regression testing under review.
- o SOW 89, Revision 4, received from Neustar extends the fee waiver period for Service Providers implementing an XML interface (NANC 372) approved.
- Change Orders 1, 2 and 3, received from Neustar implementing approved Term Sheets supporting NPAC transition - conditionally approved pending insertion of corresponding Term Sheet language and retroactive date application.

iconectiv

- o SOW 4, implements FRS sunset items for NANC 460 approved
- o SOW 5, implements FRS sunset items for NANC 461- approved
- SOW 7, implements requirements for NANC 493 (incumbent vendor implementation did not match IIS) – approved.
- SOW 9, implements requirements for NANC 496 (corrected ambiguous or incomplete requirements) – approved.
- SOW 10, implements requirements for NANC 499 (SV Modify of Due Date Validated against NPA-NXX Effective Date) surfaced during vendor testing (FRS did not reflect ITC expected results) – approved.
- o SOW 11, implements requirements for NANC 500 (User ID Character Length) local system gateway non-conformance issue surfaced during vendor testing approved.
- SOW 12, implements requirements for NANC 501 (CMISync invalid enumeration) local system gateway non-conformance issue surfaced during vendor testing – under review.
- SOW 13, implements requirements for NANC 502 (Optional data in subscription doesn't conform to XSD) local system gateway non-conformance issue surfaced during vendor testing – approved.
- SOW 14, implements requirements for NANC 498 (Simultaneous associations for a SPID) surfaced during vendor testing (corrected ambiguous or incomplete requirements) – approved.



 SOW 15, implements requirements for NANC 505 consecutively through NANC 513 addressing myriad differences or local system gateway non-conformance issues with the NPAC FRS/IIS surfaced during vendor testing – under review.

General

- Officer elections were held during the NAPM LLC's Annual meeting in November 2017, and the following individuals were elected;
 - o Co-Chair Tim Kagele, Comcast
 - o Secretary Rosemary Leist, Sprint
 - o Treasurer Joy McConnell-Couch, CenturyLink
- The NAPM LLC remains open to new members, and as an incentive to encourage new membership, the NAPM LLC approved waiving the new membership initiation fee of \$10,000 through January 31, 2018.
 - Outreach was conducted with one service provider and one association representing service providers since the past report.
- Finalized 2018 NAPM LLC meeting schedule.
- Cartesian, Inc. was approved for iconectiv as the Gateway Evaluation Process (GEP)
 Auditor and initial New User Evaluator (NUE), and Deloitte Services as the successor NUE.

FoNPAC

• No further reporting under the FoNPAC is planned, and this category will be removed from the further reports.

LNPA Transition

- The NAPM LLC exercised its right to send a 180 Day Termination Notice to Neustar under the Master Agreements (as amended by Amendment No. 97) on November 21, 2017 effectively terminating the Master Agreements with Neustar in all seven United States regions on May 26, 2018. Pursuant to the terms of SOW 97, which was negotiated with Neustar to modify these Master Agreements as part of the transition to the new NPAC administrator, the NAPM LLC has the right during the transition to send additional 180 Day Termination Notices to Neustar to extend the termination of Neustar's Master Agreements in additional 180 day intervals..
 - In correspondence dated November 27, 2017, Neustar acknowledged receipt of the 180 Day Termination Notices and the termination date of the Master Agreements to May 26, 2018, for all United States regions.
 - o On December 5, 2017, the NAPM LLC replied to that correspondence.



- iconectiv provided the NAPM LLC with written notice on August 2, 2017, in accordance with the MSAs between iconectiv and the NAPM LLC, that various actions, and failures to act, by Neustar have increased the risk of delay in the May 25, 2018 NPAC Final Acceptance Date (FAD) (the "Notice"). In the Notice, iconectiv expressly disclaimed the need to delay the FAD, but explained that further actions, or failures to act, by Neustar could subsequently necessitate a delay in the FAD. Since providing the Notice, iconectiv has not, formally or informally, requested a delay in the FAD.
- Outreach was initiated with Neustar on September 13, 2017 to discuss several key aspects of closing down the current Master Services Agreement (MSA). Initial positions have been exchanged, and next steps are pending.
- Agreement was reached between the NAPM LLC Security Advisory Council (SAC), iconectiv, and the FCC Public Safety & Homeland Security bureau for an operating framework to manage iconectiv compliance to the security requirements enumerated in the MSA.
- As a follow up to Neustar's request to accelerate hand-off of their industry custodial responsibilities for NPAC change management, iconectiv successfully assumed this responsibility as scheduled on August 1, 2017.
- In preparation for the transition, the NAPM LLC, Neustar, iconectiv and the TOM continue to finalize deliverable term sheets for all of the parallel operation needs. In this regard, Data Migration and Contingency Roll Back term sheets are under negotiation.
- In accordance with the terms set forth in PwC's Letter of Engagement to serve as the TOM, the NAPM LLC approved the third quarterly extension through January 31, 2018.
- The NAPM LLC Transition Management Advisory Committee TMAC, in their role to provide performance oversight and management of Transition Oversight Manager (TOM) quality assurance, has been negotiating with PwC for additional program management resources as we enter into the critical final phase of transition.
- The NAPM LLC continues to file monthly LNPA transition status reports with the FCC on the last day of each month, and began filing these reports in the docket in July 2015.
- The NAPM LLC continues to meet regularly with the FCC and the TOM to provide transition status, as well as apprise the FCC of issues or concerns pertinent to the transition.



Appendix

NAPM LLC Role

• Provide oversight and management of the Local Number Portability Administrator (LNPA) in accordance with the contract, orders and/or direction from the FCC.

Contact Information

- Co-Chair Tim Kagele, Comcast 303-372-2117 or tim_kagele@cable.comcast.com
- Co-Chair Teresa Patton, AT&T 972-989-5126 or <u>TP1393@att.com</u>
- Website https://www.napmllc.org/pages/home.aspx

Meeting Information

 The NAPM LLC meets monthly and a portion of each meeting is open for attendance by any interested party. The current meeting schedule is published on the NAPM LLC website.

NAPM LLC LNPA Status Reports & General Information

• The URL to the FCC website containing the NAPM LLC LNPA status reports as required by the LNPA Selection Order, and other pertinent information filed in the docket is as follows: http://apps.fcc.gov/ecfs/comment_search/execute?proceeding=09-109